

REMARKS

Claims 1 and 8 are currently amended. Support for the changes to claims 1 and 8 is found, for example, at page 5, lines 6-13 of the specification. Claims 2 and 3 were previously cancelled. Claims 1 and 4-11 are presented for further examination.

The rejection of claims 1 and 4-11 under 35 U.S.C. § 103(a) over Doetsch, US 6,193,776 in view of GB 1,580,248 and further in view of GB 1,575,792 is respectfully traversed with respect to the amended claims.

Claim 1 relates to a homogeneous, boron-doped alkaline earth peroxide, and independent claim 8 relates to a method of treating agricultural seed using a treatment composition comprising a homogeneous, boron-doped alkaline earth peroxide. According to claims 1 and 8, the alkaline earth peroxide is a mixed calcium/magnesium peroxide comprising calcium peroxide and magnesium peroxide that are homogeneously dispersed in each other on a molecular level. Significantly, claims 1 and 8 further require that boron is homogeneously distributed within the mixed calcium/magnesium peroxide on a molecular level.

Doetsch discloses a homogeneous calcium magnesium peroxide but, as acknowledged in the Office Action, is completely silent as to boron, much less boron that is homogeneously distributed within the mixed peroxide on a molecular level. These deficiencies of Doetsch are not remedied by either secondary reference.

GB '248 teaches a process for coating beet seed using a coating agent comprising calcium peroxide and other optional additives. Boron derivatives are included in the list of optional additives (page 1, lines 18-32 and page 2, lines 12-17). However, even if the boron derivatives are selected from the list of optional additives, the reference does not teach a seed coating process that results in boron that is homogeneously distributed within the mixed calcium/magnesium peroxide on a molecular level.

According to GB '248, the seeds are coating using a coating apparatus such as a granulator into which the seeds and the coating materials are fed (page 2,

lines 27-30). The Office Action alleges that the granulator would inherently mix the ingredients to homogeneity in the manner required by the claims.

Applicants disagree.

As set forth in the Summers' chapter entitled "Granulation," which was cited by the examiner, granulation is a process in which powder particles are made to adhere to form larger, multi-particle entities (see page 365). Thus, while granulation may mix the ingredients to homogeneity on a macroscopic (powder particle) level, there is no teaching that granulation results in boron being homogeneously distributed within the mixed calcium/magnesium peroxide on a molecular level. Applicants submit that GB '248 does not fairly teach or suggest homogenization in the manner or to the degree required by the instant claims. Likewise, the homogeneous distribution of boron within the mixed calcium/magnesium peroxide on a molecular level is not taught or suggested by the other secondary reference, GB '792.

GB '792 relates to a process for stabilizing particles of peroxygenated compounds. According to the process, the particles are coated with a solid coating agent, e.g., a coating agent containing at least one boric compound (see, e.g., page 1, lines 9-14 and 85-89, and page 2, lines 1-9 and 94-130).

The Office Action alleges that GB '792 "separately and expressly teaches homogenization of the peroxygenated compound with the boron compound." This is incorrect. A more careful reading of GB '792 reveals that the reference merely teaches that homogeneous particles of sodium percarbonate are introduced to a coating apparatus in order to be coated with a boric compound (page 3, lines 105-110) and that homogeneous mixtures of a commercial detergent powder and uncoated or boric acid-coated particles are subjected to storage testing (page 4, lines 56+).

The first citation to "homogeneous" relied upon by the Office Action (page 3, lines 105-110) refers to uncoated sodium percarbonate particles, and thus cannot possibly teach or suggest that a boron compound is homogeneously distributed within the percarbonate particles on a molecular level.

The second citation to "homogenous" relied upon by the Office Action (page 3, lines 56+) refers to homogeneous mixtures comprising uncoated particles or "particles coated according to the invention" (see page 3, lines 31-63). Pointedly, the homogenization referred to at page 4, line 56 of GB '792 relates to the homogenization of mixtures that may comprise boron compound coated particles, and not to the homogenization of a boron compound with respect to the particles.

Pointedly, GB '792 teaches only that percarbonate particles can be stabilized by coating the particles with a solid coating agent containing at least one boric compound (see, e.g., page 1, lines 85-89). In contrast to the repeated assertions made in the Office Action that GB '792 teaches homogenization of the peroxygenated compound with the boron compound, GB '792 merely teaches that (i) homogeneous mixtures of uncoated particles can be coated, and (ii) homogeneous mixtures including coated or uncoated particles can be tested.

Even assuming *arguendo* that GB '792, which relates to the stabilization of particles of peroxygenated compounds such as calcium peroxide or magnesium peroxide, provides the motivation to combine at least one boric compound with the mixed calcium/magnesium peroxides taught by Doetsch, the result would be mixed calcium/magnesium peroxide particles coated with a boric compound, and not mixed calcium/magnesium peroxide particles having boron homogeneously distributed within the particles on a molecular level.

In view of the foregoing, reconsideration and withdrawal of the rejection are respectfully requested.

The application is respectfully submitted to be in condition for allowance, and prompt favorable action thereon is earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned at (202) 624-2845 would be appreciated since this should expedite the prosecution of the application for all concerned.

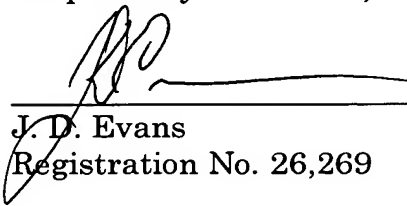
If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and

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please charge any deficiency in fees or credit any overpayments to Deposit
Account No. 05-1323 (Docket #102623.53046US).

Respectfully submitted,

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